

SAVE THE CHILDREN/CAMEROON

CHILD SURVIVAL 9

FINAL EVALUATION

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Glossary

ARI	Acute Respiratory Infection
AS	Accelerated Strategy
BLD	Baseline Data
CAPP	Center for the Provision of Pharmaceutical Products
CBA	Child Bearing Age
c c	Coordinating Committee
COGE	Health Center Management Committee
COSA	Community Health Committee
DIP	Detailed Implementation Plan
DDC	Diarrhea Disease Control
FED	European Development Fund
FNP	Far North Province
GOC	Government of Cameroon
HIS	Health Information System
IEC	Information, Education and Communication
KFJC	Knowledge, Practices and Coverage (Survey)
MINESCOF	Ministry of Social and Family Affairs
MOAg/DC	Ministry of Agriculture/Community Development Service
MOH	Ministry of Health
OPG	Operations Program Grant
ORT/S	Oral Rehydration Therapy/Solution
REO	Reorientation Program of MOH
SCF/SC	Save the Children Federation /Save the Children
s s s	Sugar Salt Solution
TBA	Traditional Birth Attendant
TT	Tetanus Toxoid
VAD	Vitamin A Deficiency
WHO	World Health Organization

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EXECUTIVE SUMMARY

The final evaluation of the Cameroon Child Survival 9 Project implemented by Save the Children/US (SC/US) took place in July 1996. The ten member evaluation team included representatives from the Ministries of Health and Agriculture from Yaounde and the Far North Province, along with representatives from the Ministry of Social and Family Affairs (MINESCOF); and Save the Children/Cameroon. One SC/US headquarters representative also participated with the external evaluator who served as the team leader.

The SC/US Cameroon Child Survival 9 Project was implemented from October 1993 through September 1996 in two Departments in the Far North Province, Mayo Danay and Mayo Kani. The project sought to reduce infant and child morbidity and mortality by improving the ability of government health center staff to provide and support child survival activities, and the Community Health Committees (COSAs) to promote access and use of the services. The project focused on four main child survival components: immunizations, diarrhea disease control, nutrition and vitamin A. The target populations of the project included 44,467 mothers, 112,487 women of child bearing age (CBA), 40,308 children under age three and 17,085 children under 12 months.

Training was the primary strategy employed by the project to build capacity among health center staff, COSA members and, later, women's groups, in child survival. Training in the four child survival components was provided to MOH staff and extension agents from the Ministry of Agriculture/Community Development (**MOAg/DC**) and the Ministry of Social and Family Affairs (MINESCOF). After being trained themselves, these groups conducted awareness raising activities among mothers and women of child bearing age. Training curricula and materials were developed in collaboration with the **MOH's** training unit. In addition to training, the project provided health centers with scales, cold boxes, vaccination/growth cards, IEC materials, nutrition demonstration equipment and, unexpectedly, vaccines. The project also repaired some health center refrigerators.

The project was able to achieve many of its stated objectives and to make progress toward others. Of note is the vaccination coverage among children 0-11 months which increased from 21.6% to 60%, and the increase from 18.8% to 53% of women of child bearing age having received TT immunizations.

Another significant and noteworthy achievement of the project was its ability to work collaboratively not only with the MOH but also with the **MoAg/DC** and MINESCOF which have mother and child health mandates. Not only did the project work effectively with these three ministries, but it was also instrumental in promoting collaboration between these ministries to the point where a Department level Coordinating Committee (CC) was established to coordinate and oversee their joint child survival activities. Interviews with committee members revealed a commitment to continue the work of the CC even **after** donor funding ends. Further to this, government officials at the provincial level have committed funds, materials and human resources to maintain the achievements of the project.

I. INTRODUCTION

A. Country and Project Area Information

The Republic of Cameroon is a Central African country with an estimated population of 12,000,000 people. The child survival project's impact areas are located in the Far North Province (FNP), which is the most populous of the 10 provinces as well as the least developed. The Far North Province is located some 1300 miles North of the nation's capital, Yaounde. Within the Province, Save the Children's work is carried out in the Departments of Mayo Danay and Mayo Kani, situated 210 km and 100 km southeast of the Provincial capital, Maroua. SC/US has been working in these Departments since 1977.

In the FNP, the MOH is represented by the Provincial Health Delegation, which is staffed by the Health Delegate, Departmental Medical officers and support staff. The Health Delegate is based in Maroua along with Delegates from other ministries such as the Ministry of Agriculture (MoAg) and the Ministry of Social and Family Affairs (MINESCOF). These two ministries are also partners of the project, whose extension agents train and support community groups.

The FNP is divided into 10 Departments with SC working in the two Departments mentioned above. Each Department is further divided into districts and then health areas (Aires de Sante). Each health area has a health center which is staffed by a Head Nurse and, on average, two to three other health care workers including a pharmacist. The Child Survival 9 Project operates in seven districts and 22 health areas which encompass 401 villages. Prior to the Child Survival 9 project, these 22 health areas were part of the government's reorientation program (REO) during which the health centers became co-financed and co-managed by the communities they serve as represented by Community Health Committees (COSA) and Management Committees (COGE).

B. Project Finance

Funds for the project were provided by the USAID/BHR/PVC Child Survival competitive grants program. The USAID funding of \$683,052 was matched by \$227,662 of SC/US private funds.

II. PROJECT BACKGROUND

A. Project Goal and Objectives

The child survival project sought to reduce infant and child mortality rates in the Mayo Danay and Mayo Kani Departments by increasing the capabilities of (1) the health centers to provide and support child survival activities, and (2) the Community Health Committees (COSA) to promote access and use of the services.

To achieve this goal, the following objectives were established and presented in the Detailed Implementation Plan (DIP). Some of these objectives were later modified. These changes are shown here in parentheses.

- 48% of children 0-11 months will be completely immunized;
- 48% (65%) of women of CBA will have received at least two doses of TT;
- 55% of women of CBA will have knowledge of the benefits of immunizations;

- 30% (50%) of mothers whose children had diarrhea would have reported the use of ORT;
- 60% of all mothers in the project area will have at least one family member who can explain and demonstrate correct preparation and use of ORS, including the provision of liquids and foods;
- 48% of children 0-36 months will be weighed at least once every three months;
- 55% of mothers will adopt appropriate feeding, weaning and food supplementation practices;
- 55% of women of CBA will be educated on the importance and advantages of consuming foods rich in Vitamin A;
- 30% of mothers will add Vitamin A rich food to the diet of their children.

B. Strategies

To achieve the above objectives the project provided training to health center staff in order to strengthen the provision of health services. Training was also provided to COSA members and TBAs to enable them to promote the primary child survival messages of the project. Training courses were also organized for MoAg/Community Development and MINESCOF extension workers who were then responsible for carrying out awareness raising activities with women's groups. The project provided equipment and supplies to the health centers to enhance service delivery, and facilitated the movement of government extension agents by providing funds to rent motorcycles and purchase fuel.

C. DIP Summary

1. Planned Inputs

- training in the four child survival focus components (immunization, DDC, nutrition and Vitamin A) for health center staff members (44), COSAs (22), women's groups (22; later changed to 40).
- provision of IEC materials to health centers along with ORS packets;
- production and provision of vaccination cards;
- provision of means of transport to COSAs (later changed to extension agents);
- establishment of nutrition and ORT rehabilitation units in health centers (later eliminated as an input);
- Provide Vitamin A capsules to health centers (later eliminated as an input)

2. Planned Outputs

- 13,593 children under one year completely immunized;
- 36,855 women of CBA received two doses TT;
- 42,230 women of CBA with increased knowledge of importance of vaccination;
- 44 health center staff, 22 COSAs, and 40 women's groups trained in project's four components of child survival;
- 22,036 children weighed at least once a quarter;

- 12,334 mothers able to demonstrate correct preparation and use of ORS, and appropriate feeding during diarrhea;
- 24,668 mothers will know the benefits of using ORS;
- 22,612 mothers educated in breast feeding, weaning practices and nutrition;
- 1/3 of children with diarrhea will be treated with ORS;
- 22 ORT and Nutrition rehabilitation units established (later eliminated);
- 22 health centers have continuous supply of ORS packets;
- 42,230 women of CBA know the advantages of consuming Vitamin A rich foods;
- 12,334 women will add Vitamin A rich foods to the diet of their children;
- 22 health centers have continuous supply of Vitamin A (later eliminated).

D. Surveys

Three surveys were conducted during the life of the project. A baseline data survey was conducted between December 1993 and January 1994. The standard **USAID** 30 cluster survey was conducted with a total of 239 mothers of children under age two. In addition to covering the child survival topics of direct interest to the project, 14 of the 58 questions were unrelated to the project's objectives. There were only two questions concerning Vitamin A and no question that would reveal the ability of mothers to correctly prepare ORS. Furthermore, the standard questions regarding feeding practices were not **useful** to the project because they are leading and too vague.

The baseline survey results show that many of the objectives and levels of achievement established by the project were very close to or exceeded the findings of the baseline data survey. These findings indicated a need to change objectives and levels of accomplishment of the project. It is not clear why the objectives and/or the levels of achievement were not adjusted during the preparation of the DIP. From this, it appears that project management, DIP developers and DIP reviewers did not understand the role the baseline data survey should play in refining the project design.

A mid-term evaluation was conducted in September 1995, three months **after** the first project manager was let go and almost two years into the project. The evaluation team surveyed only 100 mothers, and therefore the results of this survey can not be reliably compared to the baseline and final KPC surveys. Nevertheless, this evaluation provided worthwhile insights into the **status** of the project and enabled project management to develop strategies to more effectively attain project objectives. The major concerns brought out in the mid-term evaluation are addressed specifically in Annex 1.

The final KPC survey (attached as annex 6) was conducted during the month of June 1996. The same questionnaire that was used for the baseline KPC survey was used in the final survey. Mr. Jean Paul Tchupo of **IRESCO**, a research group based in Yaounde conducted the survey, entered and analyzed the data and wrote the French version of the report in collaboration with SC/Cameroon staff. The survey report was used by the final evaluation team to compare the baseline data with the final KPC data.

This final KCP did not collect information regarding the rate of complete vaccination of children nor mother's abilities to prepare ORT correctly. As a result, the SC/US Cameroon field staff re-evaluated these objectives using the 30 cluster method, which revealed a 60% coverage rate, and 54.2% correct understanding of ORT preparation. These results are presented as an Addendum to the Final KPC Survey in Appendix 6.

III. EVALUATION METHODS

The in-country portion of the final evaluation of Save the Children's Child Survival 9 Project was conducted from July 8 to July 18, 1996, by a ten member multi-disciplinary team. Team members included two representatives from the MOH, one from the capital, Yaounde, and one from the Provincial Delegation in Maroua; two representatives from the **MoAg**, one from Yaounde and one from the Province's **MoAg** Community Development Service; one representative from the Provincial Delegation of the Ministry of Social and Family Affairs; three representatives of SC/US Cameroon and one from Headquarters; and one external evaluator who served as team leader. See annex 3 for a complete list of evaluation team members and affiliations.

The team leader arrived first and prepared the Table of Achievements by reviewing project documents including the final KPC survey, completed one week prior to the evaluation. Once the team was assembled team building exercises were used to review the scope of work (SOW), develop a joint evaluation purpose statement, **identify** clients and establish a work plan. Team members identified survey respondents and developed questionnaires. The larger team was then divided into two with each team surveying a sample of the project's partners and beneficiaries. The survey was conducted in each of the two targeted Departments. Eight health centers were then randomly chosen among the total of 22. Group interviews were conducted with **COSAs** and women's groups. Four days were spent conducting interviews with approximately 50 individuals and 19 groups. (See annex 4 for a schedule of the evaluation and annex 5 for list of people interviewed.)

Following the interviews, team members regrouped to discuss and synthesize the information into the main areas of concern specified in the SOW. Among the team members, consensus was reached regarding the content of the evaluation report and this was shared with the SC/US Cameroon Field Director. On the last day of the evaluation, team members presented the preliminary results of the evaluation to the Provincial Delegates from the Ministries of Health, Agriculture and Social and Family Affairs.

IV. PROJECT ACCOMPLISHMENTS

A. Project Accomplishments

1. Table of Achievements

TABLE OF ACHIEVEMENTS

PROJECT OBJECTIVES	BASELINE DATA RESULTS	FINAL KPC RESULTS	COMMENTS
Immunizations			
1. 46% of children 0-11 months will be completely immunized: BCG, Polio, DPT and Measles	21.60%	60% *	. from supplementary final KPC: card verified vaccinations of children 12-23 mos.
2. 65% of women of CBA will have received at least two doses of tetanus toxoid (TT) vaccine	18.8% .	53%	. two or more doses (by card) of women of CBA
3. 55% of women of CBA will have knowledge of the benefits of immunizations as indicated by:			
a) recognize the need for being vaccinated	98%	99%	denominator women of CBA
b) correct timing for measles vaccination	21%	48%	
c) know pregnant women need TT	93%	88%	
d) know TT protects mother and child	74%	59%	
e) know that 2 doses of TT are needed	57%	80%	
Diarrhea Disease Control			
1. At least 50% of mothers whose children had diarrhea would have reported the use of ORT	31%	32%	incl.: ORT packet, homemade sugar salt solution 8 cereal based ORT denominator: mothers of children who'd had diarrhea in past 15 days: or 40.6 % in BLD and 39.6 in final KPC
2. 60% of all mothers in the project area will have at least one family member who can , a) explain and demonstrate the correct preparation and use of ORS, including b) the provision of liquids and foods:	not collected	54.2%	denominator: mothers of children (<24mos) who had diarrhea in the past 15 days
women who increase liquids during diarrhea	11%	22%	
women who increase breastfeeding	9%	17%	
women who increase solid foods	4%	11%	
Nutrition			
1. 46% of children (C-36 mos) will be weighed at least once every three months	48%	46%	denominator: children with growth card or 25.9% of children on BLD and 33.6% of children on final KPC
2. 55% of mothers will adopt appropriate feeding, weaning and food supplementation practices			
a) breast feeds exclusively	3%	0%	denominator: all mothers in the project area
b) begin gradual weaning between 4-6 months	53%	56%	
c) thinks weaning should begin between 4-6 mos.	42%	29%	
d) thinks weaning foods should be enriched	71%	72%	
Vitamin A			
1) 55% of women of CBA will be educated on the importance and advantages of consuming foods rich in vitamin A			
a) have heard about night blindness	62%	38%	denominator: women of CBA
2) 36% of mothers will add Vitamin A rich foods to their diet	not available	not available	KPC did not specifically ask about Vii. A food consumption
a) can name foods rich in Vii. A	38%	17%	

2. Discussion of Table of Achievements

• General

A review of the Table of Achievements shows that the most significant accomplishment of the project was an increase in the infant vaccination rate from 21.6% to 60%, and of the TT vaccination rate among women of child bearing age (CBA) which increased from 18.8% to 53%. While progress was made toward the other objectives, full attainment was hampered by many factors, including: personnel over load, poor project management during most of the first two years of the project, and the inability of project partners to provide expected inputs.

The project, which was due to begin in October 1993, got off to a slow start with child survival activities being initiated only nine months into the project. This delay was caused by an overlap of the child survival 9 project with a complementary mission-funded Operations Program Grant (OPG), both of which depended on the same personnel and were executed in the same impact areas. For the first three quarters of the project SC/US personnel focused their attention on completing the OPG activities, which, since they included the establishment of the co-financed and managed health centers, were, in a sense, a pre-requisite to the child survival activities.

The project also suffered from ineffectual project management during its first 20 months. According to project staff and colleagues in the Ministry of Health, the first Project Manager, a physician, was technically familiar with child survival concepts, and strong in conceptualizing and long term planning. Unfortunately, these same co-workers also reported that he was less able to handle the day-to-day organizational needs of the project and to manage personnel which, in the opinion of the interviewees, hampered project progress. When the first Project Manager was given notice in June 1995, a second Project Manager was named in March 1996 and project implementation accelerated. The eight months during which the project went without an official project manager may have also contributed to delays.

In addition to these SC/US internal difficulties, some of the inputs that the project partners were expected to provide were not forthcoming. The project experienced an out-stock of vaccines and vaccination/growth cards; health centers were not equipped with scales and functioning refrigerators; and neither health center **staff** nor extension agents were supervised adequately.

In response to these obstacles and in view of the findings and recommendations of the mid-term evaluation, the SC/US Cameroon field office promoted an experienced project coordinator to the position of Project Manager and developed and initiated an Accelerated Strategy (AS) in collaboration with the MOH, the **MOAg/DC** and MINESCOF. The AS called for the creation of a multi-sector coordinating committee at the Department level to plan, organize and mobilize resources to accomplish the project's objectives. The accomplishments of this project, therefore, are due in large part to the work of this Coordinating Committee as headed by SC/US, and represents the concerted and coordinated effort of less than a year.

- **Immunization**

Strategy

Save the Children did not directly provide immunization services. Rather, the project focused on improving immunization delivery by providing training to health center staff and by training **COSAs** and women's groups to serve as health promoters in the villages. The job of the latter two groups was to motivate women to get their children vaccinated either by attending the vaccination day at the health center or the mobile vaccination clinic held quarterly at the village level. **SC/US** also facilitated achievement of this objective by providing cold boxes to health centers, repairing refrigerators and training health center staff in refrigerator maintenance.

Findings

The project surpassed its child vaccination objective by achieving 60% coverage among children under age two who possess health cards; and the TT coverage rate was increased significantly, from 18.8% to **53%**, during the life of the project. These achievements are particularly significant given the stock-out of vaccines experienced in the Province during the latter part of the project. Vaccines were to be provided to health centers in the project area by the MOH, who in turn relied on UNICEF to guarantee the supply. When UNICEF abruptly reduced its provision of vaccine, the country's health centers quickly ran out. In response to this dilemma, SC/US used private funds to purchase a supply of vaccines and restocked the health centers in the project area. An "emergency" three step mini-vaccination campaign was then organized as part of the accelerated strategy.

Vaccination coverage was achieved in spite of the perceived high cost of being completely immunized. Women, COSA members and health workers all agree that the cost of being vaccinated discourages women from completing the vaccination schedule. As part of the MOH's AIDS prevention strategy, strongly endorsed by WHO, a policy was developed requiring the use of disposable needles and syringes. Thus, while the vaccine itself is free, mothers were required, at least in the beginning of the project, to purchase a disposable needle and syringe. Although this policy has been relaxed recently, the general population remains wary of reusable needles and many health centers do not provide free sterilized needles and syringes as an option during vaccination campaigns. As a result, families find it too expensive to have their children completely vaccinated. The success of the AIDS education and prevention campaign worked against the MOH's vaccination campaign.

- **Diarrhea Disease Control**

Strategy

The strategy used to achieve this objective focused on training COSA members and women's groups to promote the use of ORT and SSS among mothers. Exclusive breast feeding as well as appropriate feeding practices during diarrhea episodes were also important messages conveyed to COSA members and women's groups with the expectation that these groups would teach other women. Health Center staff were also trained in DDC issues and during the last six months of the project DDC education materials were provided to health center staff to facilitate center-based education efforts.

Findings

Changing feeding habits, especially among traditional ethnic groups, is a formidable task, and therefore it is not surprising that achieving this objective was difficult. While the percentage of women who reported using ORT increased only one percent during the life of the project, from 31% to 32%, fully 54.2% of women interviewed during the final KPC follow-up survey, were able to correctly describe ORT preparation. Furthermore, during the project feeding practices among mothers of children with diarrhea did begin to improve. The women's groups and COSA members interviewed by the evaluators said that more women do prepare the sugar salt solution (SSS) when their children have diarrhea, and, when asked, all respondents were able to correctly explain the preparation. They said that due to the project, many more mothers were using SSS than before.

Unlike the immunization intervention, the DDC strategy employed by the project relied almost entirely on volunteer community groups, trained by extension agents to promote behavioral changes amongst mothers. All of the women interviewed by the evaluation team stated that they appreciated the extension agent's training and support and that they had learned a lot from them. Further discussion however, led the team to conclude that in most cases the training of the women's groups was insufficient, sub-standard and too infrequent to have a significant impact. Due to lack of authority, project staff were not able to properly supervise the extension agents, making quality control of training practically impossible. Furthermore, while IEC materials were provided to health center staff during the last year of the project, no educational materials were provided to the extension agents or COSA members. As a result, awareness raising activities were limited to informal talks.

While all health center pharmacies visited during the final evaluation did have a stock of ORS packets, most women indicated that they prepared the SSS more frequently than the packet. Cost may be a factor since the packets range in price from 50 CFA to 200 CFA per liter of liquid; and convenience definitely plays a role for women living many miles from the pharmacy.

The evaluation team also determined that changing feeding practices, especially among the more traditional ethnic groups where men and mothers-in-law wield substantial influence on young mothers, is a very difficult and time consuming challenge, and that in the face of this, even the modest improvements reported by the project are significant.

- **Nutrition**

Strategy

Training mothers in exclusive breast feeding, appropriate weaning practices and improving children's overall diets was the strategy employed by the project for this component. Health center staff were trained, as were COSA members and women's groups. The project provided IEC materials to health centers along with equipment to conduct cooking demonstrations. Although it was not anticipated in the DIP, during the third year, the project also furnished each health center with two baby weighing scales and growth monitoring cards.

Findings

The baseline data survey results show that the project's nutrition objectives (levels of achievement) were too low at the beginning of the project and should have been adjusted in the DIP. For example, quarterly baby weighing (a questionable objective to begin with) was already at **48%**, the stated objective, before the project got underway. Likewise, three of the elements of the nutrition objective related to feeding practices, were also very close to or exceeded the stated level of achievement. It is not clear why these were not changed during the development of the DIP. Although the KPC survey questionnaire contains many questions regarding feeding practices, the leading and general way these questions are phrased ("Are you giving - name of child - eggs/meat/green leafy vegetables?") makes it difficult to accurately determine regular feeding habits and therefore to use this information in developing IEC messages or to measure behavioral changes.

The survey results show that while more children had growth cards at the end of the project than at its inception (33.6% vs. **25.9%**), only 46% of these had been weighed in the last quarter compared to 48% at the beginning of the project. This reduction in growth monitoring activities can be explained by several factors. First and foremost, was the center's inability to hold well baby clinics for lack of scales and growth monitoring cards. This deficiency was addressed by the provision of scales and cards by the project. District and Department level doctors also mentioned that difficulties in supervising health center staff for lack of transport, may have also contributed to low performance in this area. And finally all personnel-dependent activities were adversely effected when the local currency was significantly devalued and morale plummeted.

With regard to weaning and feeding practices, once again changing feeding habits is an extremely challenging and slow process which, in the Sahel especially, is compounded by poverty and the unavailability of appropriate food products during much of the year. As mentioned earlier, the performance of the government extension agents in effecting change among mothers was not inspiring. And, although the project provided materials, visual aids and cooking demonstration equipment to health center staff, facility-based health education activities generally reach a very limited audience. No materials were provided to **COSAs** or women's groups.

- **Vitamin A Deficiency Control**

Strategy

Health Center staff, COSA members and women's groups received training in Vitamin A deficiency (VAD) control. Messages focused on understanding VAD and promoting the consumption of foods rich in Vitamin A. Mass distribution of Vitamin A capsules was not deemed necessary given the low prevalence of VAD in the area (0.7% -Drew University Study cited in the DIP). In addition to informal talks, health center staff and some COSAs were taught how to build solar dryers to dry mangoes, and other seasonal fruits and vegetables rich in Vitamin A.

Findings

There are two questions on the KPC survey that pertain directly to Vitamin A deficiency. The data revealing awareness of VAD indicates that fewer people interviewed at the end of the project were aware of VAD than at the beginning of the project (62% vs. 38%). The reason for this apparent decline is not at all clear, but perhaps the translation of the question the local languages caused misunderstandings.

The second question, which asks the respondent to identify foods rich in Vitamin A also shows an inexplicable decline in this knowledge area (38% vs. 17%), with fully 53.8% of respondents at the end of the project saying they didn't know of any foods rich in Vitamin A. When asked about these findings, all of the respondents from physicians to mothers said that Vitamin A is not a problem in their area. This perception of the problem (or rather lack of one) may have led to a lack of receptiveness to the project's VAD messages and interventions.

3. Unintended Effects

In response to the findings and recommendations of the mid-term evaluation, SC/US staff decided that a more concerted and coordinated effort needed to be made to ensure the success of the project. As a result, in March 1996, a Coordinating Committee (CC) was created which included representatives from the MOH, the MOAg/DC, the MINESCOF and SC/US. The creation of this Coordinating Committee (CC) is one of most important positive effects that the project has had. The CC was so effective (particularly in the eyes of its members) in mobilizing resources and accomplishing tasks that it has generated a commitment among its members to continue functioning even after the project ends. Among the achievements the committee helped realize are: the mini-vaccination campaign; the training of 71 TBAs in the project's four CS components; the development of culture-specific IEC audio-aids to promote DDC messages; and the training of health center staff and COSA members in building solar dryers. Also, better coordination of the extension agents' work with the women's groups helped motivate more women to participate in project activities. More than just working together to achieve specific objectives, the creation of the coordinating committee helped the three ministries concerned to recognize the added value of working together. By coming together to plan activities and share resources, the MOH formally recognized that the other two ministries, MOAg/DC and MINSECOF, have important roles to play in public health.

Neither the MOH nor SC/US anticipated the short fall in vaccines caused by UNICEF. This stock-out hampered achievement of the immunization objective. SC/US also did not anticipate the need to purchase vaccines, but in doing so, it enabled health centers to carry out a mini-vaccination campaign in a final effort to increase the coverage rate.

The project did not anticipate the need to repair health center refrigerators or to provide refrigerator maintenance training to health center staff, but this service and training has also supported the immunization efforts in the impact areas and provided much needed skills among health center staff.

The personnel/management problems experienced by the project for more than half the life of the grant, prevented the project from achieving its full potential. Poor project management resulted in a weak project (re) design, the use of ineffective evaluation tools, and delayed training and the provision of IEC materials and equipment to health centers.

4. Final KPC Survey Report

The final KPC report is attached as annex 6.

B. Project Expenditures

1. Pipeline Analysis

During the life of the project, expenses in some line items were affected by the devaluation of the CFA and subsequent inflation. Most affected were the procurement and other direct costs line items as the costs of imported items rose. More travel than anticipated caused the project to exceed this line item, whereas the absence of a project manager for many months of the project and the secondment of government personnel to the project resulted in under spending of the personnel line item. Please refer to annex 7 for a copy of the pipeline analysis of actual field project expenditures by cost center, project year and life of project.

2. Discussion of budget - DIP vs. Actual

The following table shows the adjustments made to the DIP budget to account for differences in project need. All adjustments were in accordance with grant regulations which allow for budget flexibility.

<u>Cost Centers</u>	<u>DIP Budget</u>	<u>Actual Budget</u>	<u>Difference</u>
Personnel	\$393,255	\$393,255	- 0 -
Travel	\$ 33,000	\$ 33,000	- 0 -
Consultants	\$ 32,000	\$ 43,200	(\$11,200)
Procurement	\$ 46,675	\$ 15,000	\$3 1,675
ODC	\$ 59,292	\$ 79,771	(\$20,479)
TOTAL	\$564,226	\$564,226	- 0 -

Although the cost centers have been respected, during the course of the project management failed to amend the budget when the need arose.

V. PROJECT SUSTAINABILITY

A. Community Participation

The community has been very much involved in this project, with two village level groups, the Community Health Committees, or COSAs, and the Women's Groups playing key roles in project implementation. Under the Reorientation Program of the MOH, the COSAs help to manage the health centers through which many of the project's services are provided. Without the active participation of the COSAs the health centers might not perform as well or be frequented as much. Likewise, the COSA members help to motivate village women to participate in and support health center services such as immunizations and DDC activities. Similarly, women's groups participate in training sessions and also promote healthy child survival behaviors. Both of these two groups serve voluntarily; giving freely of their time and energy.

Without the co-financing of the health center, made possible by community members, the health centers would not be able to function. While the salaries of the personnel are provided by the MOH, all the other operating costs of the centers are borne by the community in the form of fees for service. Maintenance costs, supplies and medicines are all purchased with funds generated by fees for service.

Both the management support and financial support of the health centers have withstood the test of time. Since 1993-4 most of the health centers have been functioning as co-financed and co-managed facilities, offering child survival services to the communities. Support of the health center and the promotional work of the COSA and women's groups seem likely to continue after the project ends, as all of the people interviewed expressed pride in their newly acquired knowledge and had already, without project prompting, begun to serve as health educators in their own communities.

B. Ability and Willingness of Government Institutions

A major achievement of this project, though not measurable in terms of the usual child survival indicators, is the commitment of the three partner ministries to continue to maintain and build on this project's accomplishments. To this end, the MOH's Delegate in Maroua indicated that financial and material resources from other bi-lateral sources (FED, Belgium and Italy) would be used to support the work of the health centers. This support includes \$240,000 to maintain and equip health centers as well as \$24,000 per year to support the MoAg and MINESCOF's health related activities. Furthermore, the MOH plans to renovate 36 health centers in the target areas and two vehicles will be allocated to two Departments to facilitate supervision of health center staff.

Discussions with the delegate from MINESCOF indicated that they have received 18 motorcycles which their extension agents will use to continue their work with women's groups.

Most importantly is the fact that the training curricula and educational materials developed for COSAs and women's groups have become a standard part of the MOAG/DC and MINESCOF work which their agents will continue to use after CS funding ends. This means that more and more COSAs and women's groups will be trained on the importance of immunizations; appropriate weaning and feeding habits; the control of diarrhea disease; and VAD prevention. The effects of this training should be long lasting.

C. Sustainability Plan

The following table shows the actions that have been taken and the structures put in place by project staff to ensure the sustainability of the project. This plan is one of the major strengths of this project.

SUSTAINABILITY PLAN

GOAL	END OF PROJECT OBJECTIVES	STEPS TAKEN TO DATE	OUTCOMES
MOH, MINESCOF & MOAg/DC will continue to implement project-initiated child survival activities in their corresponding areas	Health Centers will carry out project-initiated activities in their corresponding areas.	Multi-Sectoral GOC Coordinating Committee established at Department level to oversee and ensure continued provision of CS services by health center staff and extension agents.	Two meetings of this coordinating committee result in commitment to maintain the achievements of the project. (unexpected outcome)
		Training for Health Center staff: <ul style="list-style-type: none">• immunizations, including cold chain maintenance ; 44 staff trained in 22 centers;• diarrhea disease control ; 44 staff trained in 22 centers;• nutrition/Vitamin A; 22 staff trained in 22 centers	Vaccination, DDC and nutrition/Vitamin A activities being carried out in 22 centers under supervision of MOH (100% of objective)

Sustainability Plan can't

		Equipment, supplies and services provided to health centers including: <ul style="list-style-type: none"> • cold chain equipment; • refrigerator repairs; • nutrition demonstration materials; • IEC materials on nutrition and Vitamin A; • nutrition surveillance equipment and supplies. 	22 health centers equipped and providing services in the areas of immunizations, DDC, growth monitoring and nutrition/Vitamin A education (100% of objective)
	Extension Agents from MINESCOF and MOAg/DC will continue to conduct child survival awareness raising activities in the 22 health areas targeted by the project.	12 Extension Agents from the MOAg/DC trained in immunizations, DDC, and Nutrition/Vitamin A; funds made available to facilitate transportation to target areas.	12 Extension Agents raising awareness among 30 women's groups in 22 targeted health areas (75% of objective)
Community Groups will continue to promote healthful behaviors among target populations (women of CBA, mothers and children < 5)	Trained Community Health Committee members (COSA), Women's Group members and Tradition Birth Attendants (TBA) will continue to raise awareness among constituents about CS issues	15 COSAs, 30 women's groups and 71 TBAs trained in the four CS components of the project.	15 COSAs (68% of objective), 30 Women's groups (75% of objective) and 71 TBAs carry out awareness raising activities in 396 villages (98% of objective) in the project area.

VI. LESSONS LEARNED

The following lessons learned have been gleaned from this evaluation effort upon reflection of the entire project. Only lessons that are deemed relevant to PVO CS projects and/or to USAID's support of these projects have been included here.

1. Child Survival Activities have a much greater chance of being sustained if the project's strategy focuses on enhancing/strengthening partners abilities rather than creating parallel service delivery systems.

Discussion : The strength of this project lies in the fact that it was implemented almost entirely through the Ministries of Health, Agriculture/Community Development, and Social and Family Affairs and that no parallel structures were created. The project trained staff from these three ministries and demonstrated that by working together much more could be accomplished than if each ministry worked in isolation. This collaboration also reminded the ministries that they share

a mandate to improve the health and well being of mothers and children and they all have something to contribute to this effort. When donor funding ends, **COSAs** and women's groups will continue to inform other mothers about child survival messages; co-financed health centers will continue to provide such services as immunizations and ORT packet distribution; extension agents will probably continue to visit and support women's groups and the Coordinating Committee will meet to discuss the health activities in the Department. The chances the achievements of this project will be sustained and even increased are very high.

2. A structure for coordinating partner's efforts and resources needs to be established to ensure effective project implementation.

Discussion: Any project that involves a partner or several partners, be they other NGOs or government entities, or both, needs to have a structure which brings the partners together periodically to coordinate inputs, review progress and trouble shoot. The base document of this coordinating body should be the DIP which should be translated into local language.

3. A multi-sectoral approach to health care has significant added value.

Discussion: Although the MOH played an important role in this project, the **MOAg** and the MINESCOF each had key roles to play and complemented the work of the MOH. Joining forces to accomplish the project objectives (which were, in fact, objectives shared by all of these partners) successfully disbursed the burden of effort among the three government partners. Each was able to take advantage of the strengths of the other ministry.

4. Collaborative efforts mean the project inherits both the strengths and weaknesses of its partners.

Discussion: While partnerships with other NGOs, government entities and even bi-lateral organizations can serve to strengthen a project and ensure sustainability, when a project depends on its partners for key inputs a certain degree of risk is assumed. This was the case of SC/US, the MOH and UNICEF. The MOH depended on UNICEF to provide vaccines for the CS project. When the supply was interrupted an objective of the project was put in jeopardy. Fortunately for this project SC/US had sufficient private funds to complement the supply and continue services, but this is not usually the case. Dependence on unreliable sources for key inputs puts the whole project at risk. Such dependence should be limited.

5. Training is a very effective strategy particularly from a sustainability perspective.

Discussion: Child survival depends to a very large extent on individual mothers changing their child care behaviors; and since the first step in changing behaviors is the acquisition of knowledge, training mothers and training trainers of mothers in child survival behaviors is a very effective strategy. Training is usually not very costly, and if done effectively has no recurrent costs. A well executed training program will have lasting effects not only on the trainees but also on the trainers since training programs leave behind curricula and materials that can be used again and modified for different circumstances. In information poor countries, knowledge is power, especially if the knowledge when put to use, can prevent sickness and death.

6. Child Survival project components should correspond to real health problems in the area; **USAID** should control more stringently for this during proposal review.

Discussion : It was not clear to the evaluation team why there was a Vitamin A component to this project when surveys in the impact area showed only 0.71% VAD prevalence and the availability of Vitamin A rich foods. Many people interviewed during the evaluation said that the difficulties the project encountered in implementing Vitamin A activities were attributable to a lack of real and perceived problem. **USAID** should have taken note of this during the proposal review and advised the project against a Vitamin A component.

7. Personnel and financial management skills are just as important in a Project Manager as technical knowledge about child survival issues.

Discussion: This project suffered from weak project management in part because technical expertise in child survival was perceived as a more important quality than management skills. The experience of this project shows that no amount of technical understanding of the child survival interventions can make up for a lack of personnel and financial management skills. **USAID** and project designers should therefore make certain that Project Managers have management experience as well as a knowledge of the child survival interventions.

8. KPC survey results should not only be used for monitoring and evaluation, but also to confirm or amend the project objectives and indicators. If project implementors do not fully understand and appreciate the latter purpose, they can not use the survey results to re-design the project. KPC survey training needs to be reviewed to see if a weakness in this area exists, and then become strengthened, if need be.

Discussion: It is not clear that the training provided to project staff regarding the KPC survey included its potential use in re-defining project objectives and indicators. Project staff, DIP writers and reviewers did not seem to be aware of the full extent to which the BLD survey results indicated a need to change some of the indicators and adjust the levels of objective achievement.

USAID should make sure that training provided to **NGOs** on KPC surveys includes information regarding the use of survey results in refining project objectives and strategies.

9. A policy that promotes the achievement of one CS intervention, may work against the achievement of another equally important one. Policy makers should be aware of the potential negative effects that their policies may have on other interventions and strategies.

Discussion: The policy developed to prevent the spread of AIDS which called for the use of disposable needles, worked against the project's vaccination efforts. The need to purchase needles and syringes drove the cost of being **fully** vaccinated beyond the ability of many Cameroonians. The AIDS policy makers were probably oblivious to the effects their policy had on immunization coverage rates. Policy makers and enforcers, such as **USAID**, are encouraged to more thoroughly examine the potential negative effects their policies can have.

ANNEX 1

MIDTERM EVALUATION CONCERNS
AND UPDATE

Responses to Main Concerns of Midterm Evaluation

Please note: while the USAID Child Survival 9 Final Evaluation Guidelines do not explicitly require a response to the Midterm Evaluation concerns, over the course of the Final Evaluation a number of issues were raised pertaining to the MTE which have been included as follows.

1. “Lack of incentives has and will continue to be a sustainability issue for the health and management committee (*COSA*).”

Lack of incentives for the COSA and high turn over rates of members were related issues brought up by some COSA members. It does seem unfair for a government policy to dictate that community members volunteer their time to manage the health center, while health center staff get paid for their time. High turn over and reduced motivation among COSA members may eventually effect the functioning of some health centers. If this happens, the Department Physician and the coordinating committee will be forced to address this issue concretely. In the meantime, some COSAs and head nurses are trying to figure out how members could be remunerated at least for attendance at quarterly meetings.

2. There are few if any women on the COSAs.

Since the mid-term evaluation **TBAs**, all of whom are women, have become members of the COSA and in some cases other women have been elected to the committee.

3. There is no system for transporting vaccines from the CAPP in Maroua to the Health Centers.

While on occasion the project has transported vaccines to health centers, when asked about the regular means of transport, all the health center staff and Department hospital doctors indicated that they have a means of transport that functioned well and was independent of the project.

4. Health Center refrigerators were out of order.

The project repaired these refrigerators and provided maintenance training to health staff. Health Center funds would be used to pay for future repairs. All refrigerators visited during the final evaluation were in working order.

5. The **COSA's** role in managing the health center is limited to allocation of the health center's funds and does not include discussion of service delivery or health problems in the villages.

All the COSAs interviewed and the notes **from** meetings verified that COSA members also discuss such things as the vaccination coverage rate. This change might well be due to the accelerated strategy promoted by the project in March-April 1996.

6. The project has not provided many IEC materials to the Health Centers.
The project did provide a few **IEC** materials to the health centers following the mid-term evaluation; although materials were not given to COSA members or to women's groups who could have used them as well.
7. Given the incidence of diarrhea, very few ORT packets are sold by the health centers, Women and COSA members mentioned that most women prefer to avoid the cost of the packet by making SSS at home. Also ORT packets are also purchased at private pharmacies.
8. There were no growth monitoring cards in the health centers - presumed to be a stock out at the CAPP.
Growth monitoring cards, which are also used as vaccination cards were available for purchase at the CAPP during the final evaluation. SC/US had also produced and made cards available to health centers. The SC/US cards were being given to mothers free of charge.
9. The project operates a separate health information system and doesn't share its information with the MOH.
The final evaluation team found this not to be the case. The Health Center nurses collect detailed information about their services and coverage levels, much of which is of little direct interest to the project. From this detailed information the health center extracts information which pertains to the project objectives. This information is recorded on a form provided by the project and sent directly to the SC office in Maroua. A system that does seem to be separate and not used by the MOH is information about the promotion activities of the COSA. It's not clear whether this information is collected routinely for SC/US or whether this information is collected and used by the MOH.
10. Coordination between the different partners of the project is lacking.
In response to this observation SC/US helped to organize the highly effective Coordinating Committee.
11. Diarrhea disease control efforts are too focused on treatment rather than on prevention.
While the focus of the DDC component of the project was still very much on promoting ORT use in an effort to fend off dehydration, in response to this observation, project extension agents had begun to promote latrine construction and use and village clean up days.
12. At the time of the mid-term evaluation, no **TBA**s had been trained or incorporated into project activities.
As part of the accelerated strategy, 71 **TBA**s were trained in the four CS components of the project during the last nine months of the project, and had become members of the COSA.

13. At the time of the mid-term evaluation, there was no regular referral system for malnourished children.

The final evaluation team did not look into this specific issue, but from casual observation it did not appear that growth monitoring was a regular activity for health centers.

14. There is no formal nor regular system for supervising or providing feedback on the activities of the health committees in their communities.

In response to this criticism, the project developed supervision forms on which the COSAs record the number and topics of promotional activities they carry out each month. This system had not been in place very long and the role of the MOH in supervising the COSA was not clear.

15. The **MOAg** and MINESCOF extension agents depend on the project for transportation to villages.

The project did provide funds to these extension agents to make regular visits to COSAs and women's groups but when visits are no longer possible for lack of transport, support for these groups will diminish. Fortunately one advantage of training is that it is usually not forgotten, if it is used regularly. From the team's interviews it appears that the messages about vaccinations, the need to treat diarrhea with SSS and to begin weaning at age 4 months seem to have been well absorbed. Also the MINESCOF did indicate that through another project 18 motorcycles would be provided to extension agents to continue village visits.

ANNEX 2

FINAL EVALUATION SCOPE OF WORK

Scope of Work for Final Evaluation

The final evaluation team should address each of the following points. As far as possible respond to each point in sequence.

I. PROJECT ACCOMPLISHMENTS AND LESSONS LEARNED

A. Project Accomplishments

1. Compare project accomplishments with the objectives outline in the DIP and explain the differences. Describe any circumstances which may have aided or hindered the project in meeting these objectives.
2. Describe unintended positive and negative effects of project.
3. Attach a copy of the project's Final Evaluation Survey with the survey results.

B. Project Expenditures

1. Attach a pipeline analysis of project expenditures.
2. Compare the budget contained in the DIP with the actual expenditures of the project. Were some categories of expenditures much higher or lower than originally planned? Please explain.

C. Lessons Learned

Outline the main lessons learned regarding the entire project which are applicable to other PVO CS projects, and/or relevant to **USAID's** support of these projects. Be sure to address specific interventions, sustainability and expenditures.

II. PROJECT SUSTAINABILITY

A. Community Participation

What resources has the community contributed and will continue to contribute that will encourage continuation of project activities after donor funding ends.

B. NGOs

What is the current ability of the NGO partners to provide the necessary financial human and natural resources to sustain effective project activities once Child Survival funding ends?

C. Ability and Willingness of Counterpart Institutions to Sustain Activities

What is the current ability of the MOH or other relevant local institutions to provide the necessary financial, human, and material resources to sustain effective project activities once CD funding ends?

D. Sustainability Plan, Objectives, Steps Taken, and Outcomes

What are the steps the project has undertaken to promote sustainability of child survival activities once project funds end? Please fill in a table with sustainability objectives and outcomes.

III. EVALUATION TEAM

A. Identify by names, titles and institutional affiliations all members of the final evaluation team.

ANNEX 3

FINAL EVALUATION TEAM

Final Evaluation Team Members

Ms. Bonnie Lee Kittle	Team Leader
Mr. Enama Assouma Blaise	Provincial Chief of Service, MINESCOF Maroua
Dr. Nkodo Nkoda Emmanuel	Sub Director of Family Health, Directorate of Community Health, MOH Yaounde
Ms. Kim Wylie	Manager, HPN, Save the Children/US
Mr. Omgba Ndoeye Francois	Directorate of Community Development MoAg., Yaounde
Mr. Atsatito Mathias	Program Manager, SC/US, Cameroon
Mr. Dama Pierre	Assistant Chief of Service, Provincial Service of Community Development, MoAg. , Maroua
Mr. Toukour Haman Seyo	Coordinator of Primary Health Care, Pro- vincial Delegation of Public Health, Maroua
Mr. Danbe Flaubert	Coordinator, Mayo Kani, Save the Children, Cameroon
Mr. Bakary Djabou-kree	Coordinator, Mayo Danay, Save the Children, Cameroon

ANNEX 4

FINAL EVALUATION SCHEDULE

Evaluation Schedule

Mon. July 8	Team Leader arrives, discusses evaluation program with Country Director; continue document review; plans team building activities;
Tues. July 9	Team Leader develops Table of Achievement; evaluation team members arrive from Yaounde;
Wed. July 10	Team Planning Meeting with complete team - review SOW, develop work plan;
Thurs. July 11	Develop questionnaires based on SOW and field work plan;
Fri. July 12	Finalize and reproduce questionnaire, conduct some interviews with delegates in Maroua; depart for Departments;
Sat. July 13	Conduct interviews in two Departments simultaneously;
Sun. July 14	Interviews;
Mon. July 15	Interviews, return to Maroua;
Tues. July 16	Discussion of findings, final interviews;
Wed. July 17	Finalize findings and lessons learned, present findings to SC Country Director; prepare presentation to Delegates;
Thurs. July 18	Make presentation to GOC Delegate; brief discussion, departure of evaluation team

ANNEX 5

LIST OF PEOPLE INTERVIEWED

People Interviewed for the Final Evaluation

Provincial Government

Mr. Doumar Tarang	Provincial Delegate of MINESCOF, FNP
Dr. Inrombe Jermias	Provincial Delegate of MOH, FNP
Mr. Enama Assoumou Blaise	Chief of Service, MINESCOF, FNP
Dr. Djao Rebecca	Chief of Service, Community Health, MOH, FNP
Mr. Tchaptchet Francois	Chief of Service, Community Dev., MOAg , FNP
Mr. Toukour Haman Seyo	Coord. Primary Health Care, Pro. Del., FNP
Dr. Oussoumanou Taousse	CAPP, Maroua

Save the Children Maroua

Mr. Abboubakar Philippe Ouattara	Field Office Director, SC, Cameroon
Mr. Atsatito Matthias	Project Manager, CS, SC, Maroua
Mr. Victor Mokeba	Project Support Officer, SC, Maroua
Mr. Nguetchuan Pierre	Administrator, SC, Maroua
Mr. Oussoumanou Abassi	Accountant , SC, Maroua

Mayo Danay Department and Districts

Mr. Barkary Djabou-kreo	CS Coordinator, Mayo Danay
Mr. Pongmo Gilbert	Chief of Community Dev. Section
Dr. Hamadou Sali	District Medical Doctor, Yagoua
Dr. Angaye	District Medical Doctor, Kar-Hay
Mr. Woumo Kawe Pierre	Head Nurse, Health Center, Yagoua
Mr. Woumo Pierre	Head Nurse, Health Center, Doukoula I
Mr. Goumgoyo Paul	Extension Agent, MINESCOF, Yagoua
Mr. Dissala Robert	Extension Agent, MOAg/DC , Doukoula
Miss Gouzahai Evelynne	Extension Agent, SC, Doukoula
COSA of Yagoua - 8 members	
COSA of Doukoula - 11 members	
Womens Group - Yagoua	
Womens Group - Ngravounda, Yagoua	
Womens Group - l'Sedele , Doukoula	
Womens Group Mobon , Doukoula	

Mayo Kani Department and Districts

Mr. Danbe Flaubert	CS Coordinator, Save the Children
Dr. Djumo Clement	District Medical Doctor, Kaele
Dr. Mboka	District Medical Doctor, Guidiguis
Mr. Moussa Nouhou	Head Nurse, Health Center, Doumrou
Mr. Kiari Sossole	Head Nurse, Health Center, Guidiguis
Mr. Djonmaila Gilbert	Chief of Community Dev. Section, M.K.
Miss Kassende Jacqueline	Extension Agent MINESCOF
Miss Aminatou Hamidou	Extension Agent, M.K.
COSA of Doumrou	
Cosa of Guidiguis	
Womens Group of Pildjimiri	
Womens Group of Windeo	
Womens Group of Guetale	
Womens Group of Pouingo	
Womens Group of Kourbi	

ANNEX 6

FINAL SURVEY REPORT &
ADDENDUM